

Serial No. 09/910,220
Atty. Doc. No. 01P12721US

REMARKS

Claims 22-26 are pending in the application. In view of the following remarks, Applicant respectfully requests allowance of the pending claims.

Rejection of Claims 22-26 Under § 103

Claims 22-26 have been rejected under 35 U.S.C. § 103(a) based on U.S. Patent No. 5,177,385 ("Cooper") and U.S. Patent No. 4,342,336 ("Satterthwaite"). Applicant respectfully traverses the rejection.

To repair an air gap baffle seal in a conventional electrical generator, it is generally necessary to remove the generator's rotor in order to access and repair the seal. Electrical generators, such as those used in the power-generation industry, are quite large. They can weigh several tons and take several days to remove. As a result, an otherwise straight-forward repair requires significant time and labor.

Applicant's invention, as recited in claim 22, addresses these problems by combining a "an air gap baffle seal" that changes from "a first, non-sealing position to a second, sealing position" with "an access portion" and a "bolt mounted substantially parallel to said air gap and including a bolt head accessible from the axially-outward end of the electrical generator." This combination of elements makes it possible for an air gap baffle seal to be easily removed and repaired without removing the generator's rotor.

Claims 22-26 have been rejected based on a combination of Cooper and Satterthwaite. Applicant respectfully submits that no suggestion or motivation has been identified in the prior art that would have lead one of skill to combine the prior art in the manner suggested. Applicant submits that there is no mention of electrical generators in Satterthwaite and, further, that there is no mention of expandable seals in Cooper. Combining Cooper and Satterthwaite without some

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suggestion or motivation from the references themselves would simply constitute hindsight reconstruction of Applicant's invention.

Applicant also respectfully submits that the cited references are not technically combinable in the manner suggested. Applicant submits that picking and choosing some of the teachings of Cooper while ignoring others would be hindsight reconstruction of Applicant's invention. In that regard, Cooper specifically teaches that its "air gap baffle ring is composed of two composite rings 47 having a seal material 50 sandwiched between and then bonded into a single ring." (col. 3, lines 35-37). This arrangement would not technically permit inclusion of an expandable seal such as the one disclosed in Satterthwaite. If the expandable seal of Satterthwaite were bonded into a single ring, as taught by Cooper, it would no longer be expandable, defeating the purpose of including an expandable seal.

Lastly, Applicant respectfully submits that the problem of removing and repairing air gap baffle seals is quite prevalent in the power generation industry. Applicant is unaware of anyone in the power generation industry who has applied Applicant's invention to solve this problem. Applicant respectfully submits that the prevalence of the problem, combined with the failure of others to arrive at Applicant's solution, is strong evidence of secondary considerations suggesting the unobviousness of Applicant's invention.

In light of the above, Applicant respectfully submits that a *prima facie* showing of obviousness has not been established. Accordingly, Applicant respectfully requests favorable reconsideration of the rejection of independent claim 22, along with claims 23-26, which depend from claim 22.

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CONCLUSION

The application is now believed to be in condition for allowance and such action is respectfully requested. Should the Examiner have any questions concerning this paper or application, or if any issues remain, the Examiner is respectfully requested to contact Applicant's undersigned attorney to resolve such issue or question.

The commissioner is hereby authorized to charge any appropriate fees due in connection with this paper or credit any overpayments to Deposit Account No. 19-2179.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

22. (Amended) An air gap baffle sealing system for directing coolant flow in an electrical generator having a rotor and a stator and an air gap therebetween, said system comprising:

at least one [parallel] ring attached to said stator, said [parallel] ring including a channel for mounting an air gap baffle seal;

an access portion attachable to said parallel ring for securing said air gap baffle seal in said channel of said parallel ring[;], wherein said air gap baffle seal includes a substantially hollow portion that extends said air gap baffle seal from a first, non-sealing position to a second, sealing position when filled with a filling medium; and

a bolt for fixedly mounting the access portion to the ring, said bolt mounted substantially parallel to said air gap and including a bolt head accessible from the axially-outward end of the electrical generator.

whereby said air gap baffle seal may be removed from said electrical generator for repair or maintenance without requiring the removal of said rotor.